Potentilla breweri Greene

Brewer's cinquefoil Roseaceae (Rose Family)

Status: State Threatened

Rank: G5S1

General Description: Adapted from Hitchcock et al. (1961): A perennial with a simple to sparingly branched crown that often has short rootstocks, and is rather copiously covered with long, silky, slender, appressed hairs and is usually also more or less woolly (at least on the lower surface of the leaves), distinctly grayish, and lacking glands. The stems are 2 to 13\% in. (5 to 35 cm) tall. The basal leaves are pinnate. There are 7 to 13 crowded leaflets that are broadly obovatecuneate, ¼ to 1 in. (1 to 2½ cm) long, and usually cleft considerably more than halfway to the midvein into linear or linear-lanceolate divisions. The stipules are ovate to lanceolate, $\frac{1}{4}$ to $\frac{2}{3}$ in. ($\frac{1}{2}$ to $\frac{1}{2}$ cm) long, membranous and entire below to leaflike and often toothed above. There are 2 to 3 greatly reduced stem leaves. The severalflowered cyme is open. The calvx may have long, silky, slender. appressed hairs or woolly hairs, and is shallowly open. The calyx can be as much as 2/3 in. (1½ cm) broad in fruit. The bracteoles are linear to lanceolate, and shorter than the usually lanceolate lobes. The vellow petals are obovate to obcordate, and exceed the sepals. There are usually 20 stamens and the pistils are numerous. The style is slender, subapical, and exceeds the smooth, greenish, 1/16 in. (1½) mm) achene.

Identification Tips: Potentilla breweri is most closely related to P. ovina. These two species can be distinguished by their leaflets. They are also geographically distinct. The ultimate segments of the leaflets of P. breweri are mostly over 1/16 in. (1½ mm) broad, and there are 7 to 13 leaflets that are usually sparsely to densely woolly on the lower surface and ¼ to 1 in. (1 to 2½ cm) long. P. breweri can be found in the Cascades and Sierra Nevada to southeastern Oregon and central Nevada. The ultimate segments of the leaflets of P. ovina are 1/32 to 1/16 in. (1 to 1½ mm) broad, there are 7 to 21 leaflets that are rarely over ¼ in. (1 cm) long, and they have straight, sharp, stiff to long, silky, slender appressed or woolly hairs beneath. P. ovina can be found in the Rocky Mountains. A technical key is recommended for positive identification.

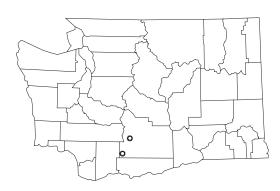
Phenology: Identifiable from June to August.

Potentilla breweri

Brewer's cinquefoil



Known distribution of Potentilla breweri in Washington



- Current (1980+)
- O Historic (older than 1980)

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Range: This species is found from Sierra Nevada, California, north to the Cascades and Siskiyou Mountains of northern California and southern Oregon, and intermittent in the northern Cascade Mountains of Oregon at least to northern Lane County. It is also found in the mountains of southeastern Oregon and central Nevada. Historically, it was known from Yakima County, Washington.

Habitat: *Potentilla breweri* grows in moist meadows and stream banks to open exposed slopes in alpine to midmontaine areas. In Washington, it was found at an elevation of 5300 ft (1615 m).

Ecology: This species occurs in moist to dry and exposed areas at middle and u pper elevations.

State Status Comments: This species is known from two historical occurrences in Yakima County. Very little information is known about these occurrences.

Inventory Needs: Moist areas and open exposed slopes in alpine and midmontaine areas within Yakima County should be systematically surveyed for additional populations.

Threats and Management Concerns: Definite threats have not been identified for this species. However, the small range of this taxon in Washington and the small number of known occurrences are major concerns. Any disturbance to the immediate habitat, such as grazing or recreational activities, may constitute a threat.

Comments: There is evidence of possible introgression with *P. drummondi* where their ranges overlap (Hitchcock et al., 1961).

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1961. Vascular Plants of the Pacific Northwest Part 3: Saxifragaceae to Ericaceae. University of Washington Press, Seattle, WA. 614 pp.

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